2002

California Department of Food and Agriculture Resource Directory

Values

Community



Quality

CALIFORNIA AGRICULTURE:

THE FARM

stewardship

A TRADITION OF INNOVATION



family

resilience



Diversity

A warm thanks to the many retirees of the California Department of Food and Agriculture who gave of their time, talent and energy to support a vital industry — California agriculture.

These individuals worked 25 years or more with the California Department of Food and Agriculture and retired between January 2000 and July 2001: Fred Andrews,
Clara Burris, Donovan Busby, Stanley Buscombe, Jack Carmany, Zosimo Carmen, Dell Clark,
David Conrad, Karen Downs, Thomas Eichlin, David Eide, Renee Ferraro, Delbert Fletcher Jr.,
Helen Fong, Glenn Gleason, Lucio Gorospe, Ordelia Hill, Byron Hirata, Leon Jensen, John Keck,
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Betty Rivera, Robert Roberson Jr., William Routhier, Islam Siddiqui, Richard Salazar, Glenn Saling,
Janice Strong, Richard Swalm, George Tamura, Wai Woo, and Paul Wurscher Jr.

2002

CALIFORNIA DEPARTMENT OF



FOOD AND AGRICULTURE

Resource Directory

California Agriculture: A Tradition of Innovation

Letter by Governor Gray Davis

Foreword by William (Bill) J. Lyons Jr., Secretary

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Gray Davis

California Department of Food and Agriculture

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A LETTER FROM



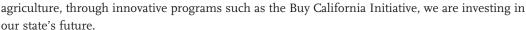
GOVERNOR GRAY DAVIS

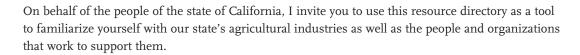
Dear Friends:

Agriculture plays a vital role in California's economy. With 88,000 farms producing more than 350 crops and an industry valued at nearly \$28 billion, our farmers and ranchers have made this state the nation's leader in agricultural production.

California's unique blend of fertile soils and temperate climates, combined with cutting-edge technology, pioneering research and marketplace innovations, has helped to create the most sophisticated food and fiber production and distribution systems in the world.

California is committed to safeguarding our diverse agricultural resources and maintaining the high quality of our products. By working to protect and promote California





Sincerely,

Dray Davis

Gray Davis



SECRETARY WILLIAM J. LYONS JR.

What comes to mind when you think of agriculture? For most of us, the answer is rooted in the past. We link agriculture to a tradition of hard work, a connectedness to the land, an emphasis on family — all values handed down by past generations.

We know, however, that agriculture is not solely about tradition. It is also defined by innovation, taking risks, and finding creative ways to solve problems. In our state, this is especially true. California's farmers and ranchers are real visionaries; they seek new and better ways to produce food and fiber of the highest quality and with the greatest care for the environment.



Indeed, it is the marriage between tradition and innovation that has secured California's status as the nation's most productive agricultural state for more than 50 years. Farmers and ranchers blend old-fashioned notions of patience and perseverance with new technologies and advanced agricultural practices. The result is a fast-changing, adaptable industry.

The tradition of innovation is alive and well in California agriculture today. The challenge now is to balance the agrarian values upon which agriculture was built with the constant demand to innovate. I know that the dedicated men and women who have made agriculture their passion and profession are working hard to meet this challenge. I hope that you'll join me in thanking them for providing such bounty.

Sincerely,

William (Bill) J. Lyons Jr., Secretary

California Department of Food and Agriculture

TABLE OF CONTENTS

| CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE | |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| California Agriculture: A Tradition of Innovation | |
| California Grown: Changing the Way Californians Shop | |
| Common Ground: Synthesizing Agricultural and Environmental Policies | |
| State Board of Food and Agriculture | I |
| Innovation in Action — Profiles | |
| Keep on Truckin': Innovation in Pest Exclusion Speeds Commerce | |
| Cultivating a Legacy: A Rancher Looks Back — and Ahead | I |
| Ahead of the Curve: Ag Commissioners Embrace Innovation | 10 |
| Programs and Services | |
| Agricultural Export Program | I |
| Animal Health and Food Safety Services | |
| Fairs and Expositions | 20 |
| Inspection Services | 2 |
| Marketing Services | 2 |
| Measurement Standards | 24 |
| Plant Health and Pest Prevention Services | 20 |
| AGRICULTURAL STATISTICAL REVIEW | |
| Overview | |
| Gross Cash Income for 2001 | 24 |
| California Farm Facts | • |
| California's Top 20 Commodities | , |
| Leading Counties | |
| Weather Highlights for 2001 | |
| Global Marketplace | |
| County Statistical Data | |
| Field Crops | The state of the s |
| Floriculture | |
| Fruit and Nut Crops | • |
| Grape Crush | • |
| Livestock and Dairy | |
| Vegetables and Melons | |
| Agricultural Exports | |
| | |
| CALIFORNIA AGRICULTURAL DIRECTORY | |
| California Department of Food and Agriculture | |
| Agricultural Publications | |
| California Advisory Boards and Commissions | |
| California Agricultural Organizations | |
| California Fair Network | |
| County Agricultural Commissioners | |
| County Sealers of Weights & Measures | |
| County Farm Bureaus. | |
| Certified Farmers' Market Associations | |
| Farm Labor Organizations. | |
| National Agricultural Organizations | |
| Selected Government Agencies | |
| State Departments of Food and Agriculture | |
| University Agricultural Programs | |
| Water and Natural Resources | · |
| California Agricultural Statistics Service Request Form | 17 |

LIST OF TABLES

| Crop and Livestock Commodities in which | Leading Varieties Crushed, Percent of Total Crush |
|------------------------------------------------------------------------|---------------------------------------------------------------------|
| California Leads the Nation | Grape Crush Tonnage and Price, 1988–200198 |
| California's Gross Cash Income, 200129 | Grape Crush Totals by Type and Variety, 2000–2001 |
| Top 5 Agricultural States in Cash Receipts, 2001 | Milk Cows and Production by State, 2001104 |
| Milk Cash Receipts, 1992–200129 | Milk Cows, Dairies and Cows Per Dairy |
| All Grapes Cash Receipts, 1992–2001 | by County and Region, 2000–2001 |
| California's Top 20 Commodities for 200130 | Commercial Milk Production by County and Month, 2001106 |
| California's Top 10 Agricultural Counties | Bee Colonies, Honey Production and Value, 1992–2001108 |
| California's Top 20 Agricultural Exports, 2000–2001 | Beef Cow Operations and Inventory, 1992–2001 |
| California's Top 10 Agricultural Export Markets, 200132 | Cattle Operations and Inventory, 1992–2001 |
| Cash Income by Commodity Groups, 1999–2001 | Cattle and Calves Average Prices Received, 1992–2001109 |
| Farm Income Indicators, 1997–2001 | Cattle and Calves Marketed from Feedlots, 1992–2001109 |
| Commodity Rank, Acreage, Production, | Cattle and Calves Slaughtered Under Federal |
| Value and Leading Producing Counties, 200135 | and State Inspections, 1992-2001 |
| Commodity Rank, Value and Leading Producing Counties, 2001 38 | Average Live Weights of Cattle and Calves Slaughtered |
| California's Farm Numbers and Size, 1950–200138 | Under Federal and State Inspections, 1992–2001110 |
| County Rank, Total Value of Production | Cattle by Class as of January 1, 1993–2002 |
| and Leading Commodities, 200139 | Cattle Inventory, Supply and Disposition, 1992–2001III |
| Seasonal Rainfall with Comparisons to Normal, 2000–200240 | Manufactured Dairy Products, 1997–2001 |
| California's Fruit and Vegetable Crop Seasons 41 | Milk Cow Average Prices Received, 1992–2001 |
| Notable Changes in County Ranks and | Milk Cows Calved, Milk Production and Value, 1992–2001 113 |
| Percentages of the State Total | Milk Cow Operations and Inventory, 1992–2001 |
| California's Leading Timber Counties, 200143 | Grazing Fee Annual Average Rates, 1992–2001 |
| County Rank by Gross Value | Hens and Pullets of Laying Age (HPLA) |
| of Agricultural Production, 2000–200144 | and Egg Production, 2000–2001 |
| Leading Commodities for Gross Value | Broiler Production and Value, 1992–2001 |
| of Agricultural Production by County, 2001 45 | Egg Production and Value, 1992–2001 |
| Commodity Rank and Leading Counties | Turkey Production and Value, 1992–2001 |
| by Gross Value of Agricultural Production, 200149 | Hogs and Pigs by Class as of December 1, 1992–2001115 |
| Field Crop Acreage, Production and Value, 1992–2001 51 | Sows Farrowed and Pig Crop, 1992–2001 |
| Field Crop Monthly Average Prices Received, 1992–2001 57 | Hogs and Pigs Inventory, Supply and Disposition, 1992–2001 116 |
| Barley Acreage and Production by County, 2000–200159 | Hogs and Pigs Slaughtered Under Federal |
| Beans, Dry Edible Acreage and Production by County, 2000–2001 . 61 | and State Inspections, 1992–2001 |
| Corn Acreage and Production by County, 2000–2001 62 | Average Live Weights of Hogs and Pigs Slaughtered |
| Cotton, American Pima Acreage and Production | Under Federal and State Inspections, 1992–2001117 |
| by County, 2000–2001 | Sheep and Lambs by Class as of January 1, 1993–2002 117 |
| Cotton, Upland Acreage and Production by County, 2000–2001 64 | Sheep and Lambs Shorn, Wool Production and Value, 1992–2001 . 117 |
| Oat Acreage and Production by County, 2000–2001 | Sheep and Lambs Inventory, Supply and Disposition, 1992–2001 . 118 |
| Rice Acreage and Production by County, 2000–2001 | Sheep and Lambs Average Prices Received, 1992–2001 |
| Sugar Beet Acreage and Production by County, 2000–200167 | Livestock Production and Income, 1992-2001119 |
| Wheat, All Acreage and Production by County, 2000–2001 68 | Livestock Inventory by Class |
| Floriculture Production and Value, 200070 | and County, January 1, 2001–2002 |
| Floriculture Production and Value, 200172 | Vegetable and Melon Acreage, Production and Value, 1992–2001 . 124 |
| Berry Acreage, Production and Value, 1992–2001 | Processing Vegetable Acreage, Production and Value, 1992–2001 . 130 |
| Strawberry Monthly and Season Average Prices, 1992–2001 76 | Processing Tomato Acreage and Production by County, 2001 130 |
| Citrus Fruit Acreage, Production and Value, 1992–200177 | Vegetable and Melon Monthly Average |
| Citrus Fruit Sales by Utilization and Value Per Carton, 1992–2001 . 78 | Prices Received, 1997–2001 |
| Citrus Fruit Monthly and Season Average Prices, 1992–200179 | Agricultural Commodity Export Values |
| Drying Ratio — Tons of Green Fruit Required | and Rankings, 2000–2001134 |
| to Produce One Dried Ton81 | Major California Agricultural Exports |
| Non-Citrus Fruit Acreage, Production and Value, 1992–2001 82 | to the Top Destinations, 2001 |
| Non-Citrus Fruit Unutilized Production, 1992–2001 | Major California Agricultural Exports to the |
| Non-Citrus Fruit Utilized Production | European Union, 2001 |
| and Average Grower Return, 1992–200186 | Ratio of California Farm Quantity Exported |
| Nut Acreage, Production and Value, 1992–200194 | to Farm Quantity Produced, 2001 |
| Raisin Production and Average Grower Return, 1992–2001 95 | Major Destinations for California Agricultural |
| | Export Commodities, 2001 |

CALIFORNIA DEPARTMENT OF



FOOD AND AGRICULTURE

CALIFORNIA AGRICULTURE: A TRADITION OF INNOVATION

Throughout California's history, the state's academic and agricultural communities have pioneered innovations that have changed the face of agriculture worldwide. Long before today's high-tech revolution, the men and women of California agriculture were advancing scientific discovery and perfecting methods that revolutionized the way in which people live. That tradition of innovation has lived on to the present day, with private industry and public sector agencies such as the California Department of Food and Agriculture working together to ensure that the state continues to be a leader in agricultural production and development.

Looking back through the history of California agriculture, one finds a who's who of innovators that pushed the envelope of knowledge. The renowned agricultural inventor Luther Burbank, for instance, migrated from the East Coast to California in the 1870s so he could establish experimental farms that became famous around the world. Burbank often had as many as 3,000 experiments involving millions of plants going on at any one time. It was in part because of Burbank's work that the U.S. government enacted patent legislation to protect the scientific discoveries of plant breeders. Thomas Edison said that the legislation would "give us many Burbanks."

Breakthroughs in genetics have resulted in the development of hundreds of new varieties of fruits and vegetables. Fruitbreeding pioneer Fred Zaiger, for example, holds more than 100 U.S. plant patents and has achieved international recognition for his contributions to the fruit industry.



Members of the California Department of Food and Agriculture's executive team work in partnership with industry, academia and government to adapt public policy to a rapidly changing and innovative industry — California agriculture.

Seated in this picture is William (Bill) J. Lyons Jr., Secretary. Standing behind Secretary Lyons, from left to right, are Lourminia Sen, Ag/Environmental Science Advisor; Karen Manor, Special Assistant; and Helen Lopez, Special Assistant. Standing in the back row, from left to right, are Vanessa Arellano, Assistant Secretary; Elaine Trevino, Assistant Secretary; Valerie Brown, Deputy Secretary; Steve Lyle, Director of Public Affairs; Bob Wynn, Statewide Coordinator, Pierce's Disease Control Program; Chris Stevens, General Counsel; Dan Webb, Deputy Secretary; and Tad Bell, Undersecretary. Not pictured is Chris Wagaman, Deputy Secretary.

Advancements in irrigation, including the use of drip irrigation, have revolutionized agriculture's use of our most precious resource. Thanks to improvements in irrigation systems, many farmers are able to use less water with more precision.

"The Pierce's disease/
glassy-winged sharpshooter
program is a model of publicprivate partnership. California's
wine growers have such confidence
in the program that we are
assessing ourselves more than
\$6 million annually."

John DeLuca, President and CEO Wine Institute

The adoption of precision agriculture also continues to keep California's farming and ranching operations in the vanguard of progress. Farmers use satellite-based global positioning systems, for example, to track field data with great accuracy.

In this climate of innovation, the California Department of Food and Agriculture has always remained flexible in order to meet the changing needs of both agriculture and society. The department's priorities include not only traditional strategies such as pest and disease control, but now encompass such things as addressing environmental issues and marketing of California agricultural products. The department is continually updating its mission and expanding its vision to make sure that California's agricultural policies keep up with changes in science and markets, along with industry and public concerns.





This year, Governor Davis launched the Buy California Initiative, the cornerstone of which is the California Grown marketing campaign. California Grown is the Golden State's opportunity to showcase the tremendous agricultural resource that is vital to our economy and our heritage. By promoting California-grown agricultural products, we are investing in California's economy, supporting our state's farmers and ranchers, and protecting jobs that will keep our rural communities vibrant and alive for years to come.

California is the nation's number one agricultural state not just in production statistics, but in ideas, vision and spirit. As long as both industry and government cultivate these qualities, the Golden State's agricultural future will be bright.

CALIFORNIA GROWN: CHANGING THE WAY CALIFORNIANS SHOP

What began as an idea to support California agriculture has blossomed into an extensive marketing campaign to influence purchasing decisions at the grocer's check-out counter.

What is this campaign?

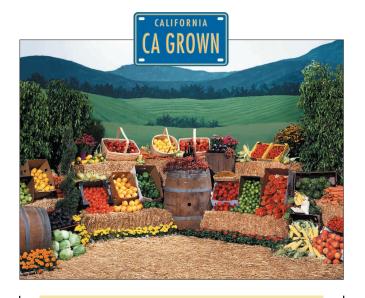
It is an innovative statewide marketing effort with a very simple premise: California Grown will help to bolster the future of California's agricultural industry by encouraging consumers to buy California agricultural products. Research shows that Californians will purchase fruits, vegetables and other agricultural products grown in their home state if they know the origin. It's a simple matter of communication, and that's what the marketing program is all about.

The California Department of Food and Agriculture is overseeing the campaign in conjunction with an advisory body — the Buy California Marketing Agreement, which comprises some 20 industry organizations. The marketing agreement came about as the result of Governor Davis' Central Valley Economic Development Summit held in 2000. The campaign is supported by federal, state and industry funds. And, together, industry and government are working to execute this cross-commodity campaign.

Already, this effort has transformed an idea into reality. Consumers are hearing about the California Grown campaign through statewide marketing efforts that were launched in August 2002. In addition, the program is partnering with retailers to promote the message. From tiny stickers and big signs in the produce aisle, to billboards and television commercials, the campaign will inform Californians that they should buy "California Grown."







The California Grown campaign encourages Californians to buy agricultural goods grown in the Golden State through advertising and retail promotions.

Education, Research, Food Safety... It's All Part of the Plan

The consumer campaign is a key part of the program, but there's more to the overall initiative. The remainder of the Buy California Initiative will fund a wide-ranging array of projects, from educating our younger generations about the importance of healthy diets to identifying new ways for farmers to protect the environment.

With this new campaign and initiative, the Davis administration and California's agricultural industry are promoting our state's great bounty. According to Governor Davis, "Today, every Californian has a stake in the success of rural California. It's time to remind the world that we have the best farmers and ranchers, and the best agricultural bounty on God's green earth."

COMMON GROUND: SYNTHESIZING AGRICULTURAL AND ENVIRONMENTAL POLICIES

Can the agricultural and environmental communities agree on much? "Much more than each side realizes," says an enthusiastic Steve Shaffer, who heads the California Department of Food and Agriculture's new Office of Agriculture and Environmental Stewardship. In its short existence, Shaffer's office has become instrumental in assisting both communities, plus other stakeholders, find common ground to achieve lasting agreements and policy solutions.

The office also provides accurate and timely information, ensuring a solid scientific basis for government actions. Says Shaffer: "Whether it's a new regulation, or it's regulatory relief, or it's an incentive program, whatever the action, there needs to be a scientific foundation. Within this office, we now have an excellent technical and scientific group allowing us to engage the agricultural community, regulatory agencies and environmental groups on a technical level. This is making it possible for the department to improve the state's scientific foundation for regulatory actions."



The Office of Agriculture and Environmental Stewardship helps to ensure a solid scientific basis for regulatory actions. Pictured from left to right: Matt Summers, Air Resources Engineer; Casey Walsh Cady, Environmental Scientist; Steve Shaffer, Director; Carmen Mello, Management Services Technician; Ken Trott, Staff Environmental Scientist; Al Vargas, Staff Environmental Scientist; George Bluhm, Air Resources Engineer; and Matt Reeve, Staff Environmental Scientist. Not pictured is Gerry Miller, Senior Environmental Planner.



The Office of Pesticide Consultation and Analysis works collaboratively with the Agricultural and Environmental Stewardship group. It has become the department's eyes and ears on all state and federal pesticide regulatory issues. To accomplish this mission, the office provides economic analysis of proposed pesticide regulatory actions, working closely with the California Department of Pesticide Regulation, U.S. Department of Agriculture, U.S. Environmental Protection Agency, and the University of California. Pictured from left to right: John Steggall, Senior Environmental Scientist; Dave Luscher, Senior Agricultural Biologist; Lisa Serrano, Office Technician; Charles Goodman, Senior Research Manager; and Barbara Todd, Senior Research Program Specialist.

Shaffer observes: "This is a whole new scientific and technical exchange that's been generated. Our goal is to encourage reasonableness in regulations. This will, in turn, help to build confidence on the part of the agricultural community in terms of the regulatory process."

The Agriculture and Environmental Stewardship office not only advises and communicates, but also implements sound public policy. In its short existence, the office has assembled an impressive record of accomplishments.

New Uses for an Old Agricultural Byproduct

The Rice Straw Utilization Tax Credit Program provides \$400,000 per year in tax credits (at a rate of \$15 per ton of rice straw utilized) to those who make environmentally sound use of rice straw. The popular program has been used mainly by dairy operations that use straw as bedding material in barns. The state Air Resources Board, the environmental community and the American Lung Association support the program. Shaffer says that these entities "recognize that California farmers have done their

part in reducing rice straw burning, and they need some help in terms of moving the rice straw off their fields in an economically viable manner."

There is also the Rice Straw Utilization Grants Program. This program has been funded at \$2 million, with grants allocated at a rate of \$20 per ton of rice straw utilized. Eligible rice straw uses include cattle feed, composting and erosion control. It is estimated that the tax credit and grants programs account for 70 percent of rice straw being utilized in the state.

Finding Lasting Solutions

In the CALFED Bay-Delta Program, which is designed to address the state's critical water needs, the Agriculture and Environmental Stewardship office is the lead agency staff for CALFED's Working Landscapes Subcommittee. The subcommittee is an outgrowth of the department's success in getting CALFED to recognize that actions such as ecosystem restoration may impact agriculture. To this end, the subcommittee, which brings together state, federal and local agencies, plus agricultural and environmental organizations, seeks to create partnerships to meet ecosystem restoration goals and, more broadly, create beneficial outcomes for agriculture and the environment.

An important issue for the west side of the San Joaquin Valley, the Tulare Basin and Imperial Valley is the need to carefully manage irrigation drainage water to maintain productivity of the land and protect the environment. In looking for an innovative approach to this problem, the office spearheaded a coordinated effort of farmers, state agencies and environmental groups. Their efforts resulted in streamlined water quality regulations — through Senate Bill 1372 (Machado) — that will reduce grower costs while improving on-farm water use efficiency and protecting wildlife and water quality.

California is the nation's largest producer of dairy products. To protect streams and groundwater from inadvertent pollution, the office is actively involved in the California Dairy Quality Assurance Program. This effort brings together government agencies and the dairy industry to address food safety, animal welfare and environmental stewardship in milk production. Staff helped develop and implement a program of producer education, self-assessment, and independent evaluation that has resulted in ro5 producer evaluations and 80 producers achieving certification.

The agricultural sector has come under increasing attention to help improve air quality. As cities continue to spread into the rural landscape, there is increased pressure on all industries to reduce air emissions. This can have a significant impact on agriculture. In order to assess this impact, from both the scientific and economic perspectives, the office's research has found that air emission estimates from agricultural sources are often based on outdated studies. Some previous estimates of emissions from dairies, for instance, could be overstated by a factor of 3 to 10.

"Thank you for your efforts on behalf of a sustainable and healthy future for California agriculture and its environment."

> Ben Wallace, Conservation Associate California Wilderness Coalition

Further, the office was a key part of the department's push to develop information to assist with passage of the agricultural provisions of SB 5X. The bill creates incentives to purchase high efficiency agricultural equipment, retrofit equipment to burn alternative fuels, purchase advanced metering equipment, replace inefficient agricultural pumps, and develop bio-gas digestion power production on dairies and other facilities. So far, 10 dairies have been approved to install anaerobic digesters for their on-site power needs, turning waste product into 1815 kilowatts of renewable energy. This is enough energy to light nearly 2,000 homes.

Summing up his unit's vision, Steve Shaffer says: "Agriculture is not just food, feed and fiber. Agriculture helps society by providing open space, wildlife habitat, flood protection and much more."

Agriculture is getting smarter in its environmental practices because farmers "want to sustain this resource for future generations." Importantly, Shaffer notes: "This is the same perspective that the environmental community has. Agriculture needs good air and water quality to be productive. There are commonalties, but they have different cultures." By bringing those two cultures together, the Agriculture and Environmental Stewardship office is helping to guarantee a cleaner and more prosperous future for all Californians.

STATE BOARD OF FOOD AND AGRICULTURE

The California State Board of Food and Agriculture advises the governor and secretary on agricultural issues and consumer needs. The board often acts as a host to bring together local, state and federal government officials, agricultural representatives and citizens to discuss current issues of concern to California agriculture.

The board's 15 members are appointed by the governor and are selected to represent a broad range of agricultural commodities, a variety of geographic regions, and both the University of California and California State University systems.

Members of the board are residents of California and are specially qualified for service through expertise or experience in the following arenas: farm, business, economic, environmental, or consumer affairs. Members serve four-year terms without pay. There are no term limits, and appointments do not require Senate confirmation.

The California State Board of Food and Agriculture meets the last Wednesday of every month at the California Department of Food and Agriculture's main auditorium, unless otherwise notified. The public and media are welcome to attend.

BOARD MEMBERS

Charles "Chuck" Ahlem

Dairy farmer representing the agricultural industry.

Drue P. Brown

Agricultural and environmental specialist representing the agricultural industry.

A. Charles Crabb, Ph.D.

Representing the California State University at Chico, College of Agriculture.

Mary Eisen Cramer

Rancher representing the agricultural industry.

W.R. "Reg" Gomes, Ph.D.

Representing agriculture and natural resources programs for the University of California.

John H. Hayashi

Vegetable farmer and irrigation specialist representing the agricultural industry.

John C. Hisserich, Dr. P.H.

Representing the general public with expertise in public health.

Charlie Hoppin

Diversified farmer representing the agricultural industry.

A.G. Kawamura

Produce grower and shipper representing the agricultural industry.

Douglas Maddox

Dairy farmer representing the agricultural industry.

Craig McNamara

Diversified farmer representing the agricultural industry.

Marvin A. Meyers

Diversified farmer representing the agricultural industry.

Mary Borba Parente

Dairy farmer representing the agricultural industry.

Karen Ross

Representing the agricultural industry from the winegrape sector.

INNOVATION IN ACTION PROFILES

What happens when you combine the rich traditions of agrarian life with the robust trend-setting spirit that defines California? Answer: You get the most productive and progressive agricultural economy in the world.

The Golden State — with its astounding diversity of crops and climates — is a place where innovation is the tradition. For this we can thank a cadre of dedicated professionals who are constantly seeking out the next big thing on the agriculture scene — ideas that promote efficiency, protect natural resources, and help produce the highest quality agricultural goods in the world.

The articles that follow offer a snapshot of people setting the pace of change in California agriculture. They are individuals who respect the history of farming and ranching in our state and are working to carve out a bright future through creative new ideas.

At border stations in Blythe and Needles, a speedy new way of identifying insects traveling aboard vehicles entering the state has revolutionized the inspection process. Instead of shipping specimens to the state laboratory in Sacramento via ground transportation, images of the pest are e-mailed to scientists who can identify them within minutes. Now, trucks carrying perishable goods can get them to market more quickly by avoiding long waits at the border.

In Susanville, fifth-generation rancher Hannah Tangeman-Cheney is ushering her family's enterprise into its 140th year. Blending a deep respect for the land passed down by her forebears with a modern sensibility for resource management, Tangeman-Cheney exemplifies how tradition and innovation coexist in California agriculture today.

As the world around us changes, so must agriculture. Three county agricultural commissioners explain what they're doing to keep up with ever-increasing demands. Christine Turner of Placer County tells how a marketing director is boosting sales and promoting agri-tourism to help growers in her area. Eric Lauritzen explains how he's serving Monterey County's vegetable industry by offering organic certification for farming operations. And San Joaquin County's Scott Hudson describes how a new program to streamline documents will serve produce exporters in his area.

Everywhere you turn, California is leading the way by meeting new challenges with bold solutions. It's what keeps agriculture growing strong.

Keep on Truckin': Innovation in Pest Exclusion Speeds Commerce

Dennis Day notices a lot more truck drivers smiling these days. That's because an innovation at agricultural inspection stations is cutting drivers' wait times at the border, helping them get their perishable loads to market more quickly.

"They love it," says Day, a plant quarantine supervisor at the agricultural inspection station in Blythe, describing the reaction from haulers, shippers and brokers of fresh produce.

So what's everyone grinning about? New digital imaging technology that is speeding up the process of identifying pests found on commercial produce shipments entering the state. Instead of waiting days for a decision on whether a truck can enter California, it takes hours, sometimes minutes.

Bill Sandige, a program supervisor with the California Department of Food and Agriculture's Pest Exclusion Branch, says the department first became interested in a digital imaging system for pest identification after hearing about Arizona's recent success with it.

The technology is currently in place at two California inspection stations, Blythe and Needles, but Sandige anticipates that all the stations will adopt digital imaging.

The need is certainly there. Each year, about 33 million vehicles (a fifth of them trucks) pass through California's 16 agricultural inspection stations located along the state's borders. The purpose of the stations is to prevent harmful pests, such as gypsy moth or Japanese beetle, from entering the state.

When non-commercial vehicles are carrying pests (remember the box of apples Aunt Betty sent home with you?) the process is straightforward: the finding is noted, station personnel dispose of the product, and the driver continues on his way.

Because of the volume of goods they carry, commercial vehicles undergo a more involved examination. When a truck arrives at a border station, it is inspected both inside and out. Samples from the load, such as mangos from Mexico or grapefruit from Florida, are examined for pests.

If the load comes up clean, the truck continues to its destination.

If a live pest is found, however, it must be identified before the truck can be cleared for entry. Shipments containing benign or widely established pests get the green light. When a more threatening critter is found onboard, the load is rejected and must return to its point of origin. About 70,000 lots of materials were turned away in 2001.

The time-consuming part is getting the pest from the station to an expert who can identify it. Stations without digital imaging must do it the old-fashioned way. That means putting the specimen into a vial and shipping it overnight to the department's Meadowview laboratory in Sacramento. All told, the process takes a minimum of two days, and it could take longer if shipments are delayed or the discovery is made on a weekend.

The processing time has changed at the high-volume Blythe and Needles stations. When a live pest is found, station personnel mount it on a slide and photograph it under a microscope, creating a magnified digital image of the creature. The images are then transmitted via e-mail to the Meadowview lab.

Within minutes, the work of Dr. John Sorensen, a senior insect biosystematist, and his colleagues begins. Because a majority of the specimens are ants — Sorensen's area of expertise — the bulk of the identification duty falls to him. He opens the e-mail, views the images and, provided he can see the distinguishing characteristics, identifies the insect.

"It has made things immensely faster," says inspector Day. And because hurried truck drivers are no longer delayed there for days, the Blythe inspection station has become a more enjoyable place to work.

"It makes the whole environment much more pleasant because the truck drivers know that we're doing everything we can to get them on their way." says Day.

Cultivating a Legacy: A Rancher Looks Back — and Ahead

If anyone knows about California's rich agricultural tradition, it's Hannah Tangeman-Cheney. The ranch she now owns and operates has been in her family for 140 years — and still counting.

Nestled against Diamond Mountain about seven miles south of Susanville in Lassen County, the Hulsman Ranch is a testament to the resilience of farmers and ranchers in California. Tangeman-Cheney's great, great grandfather, John F. Hulsman, purchased the property from Peter Lassen's estate in 1862 and, aside from a brief period in the 1930s when a bank assumed ownership of the ranch, it has remained in the family's hands ever since.

To keep a farm operational for five generations is no small feat. In fact, the Hulsman Ranch is one of only a handful of California's agricultural entities that belong to the 100 Year Club cosponsored by the California State Fair as a way of celebrating our state's agricultural heritage.

What's even more unique about the Hulsman Ranch is that since 1914, it has been owned and operated by women — a claim few farms can make. According to data from the most recent census of agriculture, women operate 8.6 percent of all working farms in the United States. Tangeman-Cheney, however, is unfazed by the legacy of female proprietorship at the Hulsman Ranch.

"I don't think I looked at it as unusual," she says. "I just thought of it as something the women in our family had always done."

Tangeman-Cheney returned to the Hulsman Ranch in 1982 after completing a degree in ag business at Cal Poly so that she could assist her mother, who had suffered a heart attack. She and her sister Susan Tangeman, a veterinarian, assumed ownership of the ranch in the 1990s.

Today, the timber, cattle and sheep operation is thriving thanks to the sisters' resourcefulness and commitment to long-term planning. Although timber has always grown on the ranch property, it wasn't until Tangeman-Cheney and her sister took over that they began to consider it as a source of income.

"I wouldn't necessarily characterize us as cutting edge, but given the resources that we have, we try to find management practices that work in harmony with the land and allow us to stay here long-term," explains Tangeman-Cheney.

This has meant working with a licensed professional forester to develop a non-industrial timber management plan and become a green-certified timber operation. Green certification by the Forest Stewardship Council means that the timber is raised and harvested on a sustainable basis or, in Tangeman's words, "you're never cutting more than you're growing, and you're respecting the resource." It also entails proper riparian management and erosion control.

Is farming much different today than it was 100 years ago? Tangeman-Cheney certainly thinks so, in part because of technological innovations. She and her sister recently uncovered a journal written by her aunt in 1937 that describes how several employees and family members put up more than 300 acres of hay using horses — a task Tangeman-Cheney finds daunting. Thanks to modern machinery, she and one employee complete that same job today in a fraction of the time.

Tangeman-Cheney doesn't long for the good ol' days. "I'm not a romantic," she explains — yet her approach to modernization is a relatively cautious one. In her opinion, the ranch itself — including its limitations in terms of topography and weather — should dictate what new technologies are appropriate to adopt.

"We can't force technology onto our property," she asserts.

"The latest technology may not be compatible with our resource, so I think we have to be careful about technology and make sure that it fits our long-term needs."

So what innovations will the next generation utilize on the ranch? "Information technology, getting information about things like marketing and pricing to farmers quickly," Tangeman-Cheney predicts.

"There's a real beauty where I live, and I hope there's a way to preserve that beauty and still be a viable farming operation." For Tangeman-Cheney, that's an agricultural legacy worth honoring.

Ahead of the Curve: Ag Commissioners Embrace Innovation

If there's one thing California's 55 county agricultural commissioners can agree on, it's that there's no such thing as a typical day in their line of work. How could there be with so many different tasks to juggle? From weighing in on state and local policy issues to managing core programs to keeping up with day-to-day administrative duties — there's no room for routine.

"Each day is everything but typical," according to Scott Hudson, agricultural commissioner for San Joaquin County.

One thing that has remained consistent in their 121-year history, however, is the ability of commissioners and their staffs to adapt to new changes and challenges alongside industry. In order to provide the best possible service, agricultural commissioners must keep pace with farmers and ranchers as they adopt new technology and advanced agricultural practices.

"Any innovation that we demonstrate is really a reflection of the innovation of the industry itself," says Monterey County Agricultural Commissioner Eric Lauritzen. "So as industry changes, we have to respond."

Keeping current with changes in agriculture has often meant stepping into roles that extend beyond the traditional agricultural commissioner duties. While 20 years ago the bulk of a commissioner's time might have been spent on activities like pest exclusion and enforcing the state's agricultural laws, today's commissioners and their staffs do all that and more.

As pressures from urban growth, environmental regulations, and land use decisions force farmers to farm differently, commissioners' jobs are changing, too. One result, says Placer County Agricultural Commissioner Christine Turner, is that commissioners are now "interfacing more and more with entities that weren't part of the traditional ag arena a few years ago."

Agricultural commissioners are also becoming more innovative in their approach to addressing the needs of their constituencies. In Placer County, for example, a new position — agricultural marketing director — was created to help keep agriculture viable in the face of rapid population growth in the county.

"It's probably the most creative thing this county has done to try to help agriculture survive," says Turner. And the response has been encouraging. "We've gotten a lot of good press and positive feedback from farmers and the community."

In Monterey County, Lauritzen and his staff are committed to keeping pace with the area's forward-thinking vegetable industry by offering customized services to suit their needs. Perhaps the best example is the organic certification program — the first such county program to be approved by both the U.S. Department of Agriculture and the California Department of Food and Agriculture.

New federal standards require that all commodities labeled organic must be certified by an authorized body. The certification program evaluates everything from the materials and cultural practices a grower uses to the history of the field where the product is grown.

Although still a fledgling program, Lauritzen asserts it's a "perfect example of recognizing the changing complexion of agriculture."

The spirit of innovation is also alive in San Joaquin County, where Hudson and his staff are working with the U.S. Department of Agriculture to develop a system that uses technology to assist growers who ship their products overseas.

Still in its testing stage, the system would allow for electronic issuance and tracking of phytosanitary certificates, the paperwork verifying that a product meets an importing country's quarantine requirements. The online system would speed up the certification process, a big plus for busy shippers rushing to get their products to port. It would also save time for county inspectors who must travel from shed to shed to finalize the certificates.

"New technology can be expensive, but we're committed to putting significant resources into it," says Hudson. "If we're going to provide good customer service to industry, we have to keep up with the technology that they're using — and they've become quite innovative."